

Work Order ID: 56498

February 25, 2010 10:54:06 AM



Page 1

Item ID: D3391-025

Accept



Setup Start



Revision ID:

Item Name: Aft Tube Assembly

Stop



Start Date: 2/25/10 Start Qty: 1.00



Cust Item ID:

Required Date: 3/05/10 Req'd Qty: 1.00

Customer:

Reference:

Approvals: Process Plan: *AK* Date: 10-2-25 Tooling: Date:
QC: Date: SPC (Y/N): Date:

Run Start



Stop



Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Draw Number	Draw Rev.	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	----------------	--------------	--------------	---------------	---------------	------------------	----------------

Draw Nbr	Revision Nbr
----------	--------------

D3391	Rev H
-------	-------

100

0.00



MORI SEIKI CNC LATHE LARGE

Mori Seiki

Memo

0.00

Mori Seiki CNC Lathe Large

Turn as per Folio FA599

Rev: AA & Dwg D3391 Rev: 4

scribe batch # on fwd end at 90 degree

(K)

AKM
MB

10-03-03

110

0.00



QC2- Inspect parts off machine FAI/FAIB

QC

Memo

0.00

Quality Control

(K)

AKM
MB

10-03-04

111

0.00



QC8- Inspect parts - second check

QC

Memo

0.00

Quality Control

10.3.16

0

W/O: 56498

WORK ORDER CHANGES

DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector
10-03-10	Dwg W/O header	Reference D50 # in drawing box. perm change	MA	10.04.27		1003-10	1003-10

Part No: D 3391-025 PAR #: N/A Fault Category: Lge Fab NCR: Yes No DQA: 1A Date: 10.04.27
 Resolution: Accepted Disposition: Use-as-is QA: N/C Closed: 1A Date: 10/04/27

NCR: 56498

WORK ORDER NON-CONFORMANCE (NCR)

DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			
10.03.16	100	One hole off-center by .014"	OP 10.03.16 per OS/042	Acceptable.	S.F. 10/03/16	10.03.16	OP 10.03.16 per OS/042	10/03/16

NOTE: Date & initial all entries

Work Order ID 56498

February 25, 2010 10:54:06 AM

Page 2

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Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Run Start

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Draw Number	Draw Rev.	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
120  HAAS 1 HAAS CNC vertical machine #1	HAAS CNC VERTICAL MACHINING #1 Memo 1-Machine as per Folio FA 599 Rev: <i>MS</i> & Dwg D3391 Rev: <i>4</i> 2-Deburr	0.00 0.00		<i>L.B 10/03/08</i>		<i>1</i>	<i>0</i>		
130  QC Quality Control	QC2- Inspect parts off machine FAI/FAIB Memo	0.00 0.00		<i>L.B 10/03/08</i>		<i>1</i>	<i>0</i>		
140  QC Quality Control	QC8- Inspect parts - second check Memo	0.00 0.00		<i>MS 10.3.14</i>		<i>①</i>			

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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Page 3

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Run Start



QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop



Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Draw Number	Draw Rev.	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
150 	Skidtubes	0.00							
Skidtubes	Memo	0.00							
Skidtubes	1-Drill (PILOT HOLE) aft cap holes per Dwg D3391 using DT8803								
160 	BENDING MACHINE - SKIDTUBES	0.00							
CNC Bend 1	Memo	0.00							
CNC Delta 100 Bender	Form as per Dwg D3391 Using Bend Prog 3391025								
170 	QC5- Inspect part completeness to step on W/O	0.00							
QC	Memo	0.00							
Quality Control									

Handwritten signature and date: 10-3-17

Handwritten note: h=4.25"

Handwritten date: 8/10/03/17

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

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Page 4

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Customer:


Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Run Start

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Draw Number	Draw Rev.	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
180		0.00							
	Skidtubes								
Skidtubes	Memo	0.00							
Skidtubes	1-Open Aft cap pilot hole to .208" as per Dwg D3391								
	2-Drill float bag holes using DT8809 as per Dwg D3391(Holes marked "A" Only.								
	3-Drill wearplate holes as per Dwg D3391 using DT8878(Mid Tube) & DT8217 Wearplate Jig . *****Do Not Open To Finished Size*****								
	4-Drill Wearshoe holes as per DWG D3391 using DT8939 locating from 2 previously drilled aft wearplate holes.								
	5-Open wearplate holes to 0.250" and c'bore as per dwg D3391								
	6-Open up all wearshoe , wearplate to 0.297"and float bag holes to 0.328" as per Dwg D3391.								
	7-Deburr								

1 4013117

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February 25, 2010 10:54:06 AM

Page 5

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Customer:






Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Run Start

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Draw Number	Draw Rev.	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
190  QC Quality Control	QC5- Inspect part completeness to step on W/O Memo	0.00 0.00							
200  HandFinish Hand Finishing	Chemical Conversion Coat per QSI005 4.1 Memo	0.00 0.00				1		11 10/31/18	
210  QC Quality Control	QC3- Inspect Part Finish Memo	0.00 0.00							 10-3-18

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Page 6

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Customer:

Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Run Start

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Draw Number	Draw Rev.	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	----------------	--------------	--------------	---------------	---------------	------------------	----------------

220

0.00



Skidtubes

Skidtubes

Memo

0.00

Skidtubes

Instal spacers as per dwg D3391

A/R Magnabond 6398 Batch: M112417

exp. date: 11/1/30

cure time 12hrs as per QSI0015

M 10/3/23

230

0.00



QC

QC5- Inspect part completeness to step on W/O

Memo

0.00

Quality Control

8/10/04/01

G1

PTO =>

240

0.00



Powdercoat

White Gloss(Ref:4.3.5.1) per QSI005 4.3-Alum

M114207

Memo

0.00

Powder Coating

START TIME: 8:30 AM

OVEN TEMPERATURE: 320°F

FINISH TIME: 9:00 AM

=> 10/04/20

1 0

W/O: 56498		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector
10/04/20	230.1	Per. Image Pressure Wash & Realign AS per PAR 09-043	YI	10/04/20	X1		S. 10/04/22

Part No: D3391-025 PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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February 25, 2010 10:54:06 AM



Page 7

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Customer:

Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Run Start



QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop



Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Draw Number	Draw Rev.	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
250	QC3- Inspect Part Finish	0.00							
QC	Memo	0.00							
Quality Control									
260	HandFinishing	0.00							
HandFinish	Memo	0.00							
Hand Finishing	1-Install inserts as per Dwg D3391 2-Install Aft Cap as per Dwg D3391 A/ R Sikaflex-241/-291 <i>M 11/24/29</i> Sikaflex expiry date: <i>10/08</i>								
270	QC5- Inspect part completeness to step on W/O	0.00							
QC	Memo	0.00							
Quality Control									

*Sidol 1/22**(K)**①**BR 10-4-22.**Sidol 1/22**(K)*

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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February 25, 2010 10:54:06 AM



Page 8

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Cust Item ID:

Required Date: 3/05/10 Req'd Qty: 1.00



Customer:

Reference:

Run Start



Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Stop



QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run HoursDraw
NumberDraw
Rev.Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

280

Identify as per dwg & Stock Location: _____

0.00



Packaging

W/O 56672

Memo

0.00

Packaging

D412-742-043

①. BL 10-4-22

290

QC21- Final Inspection - Work Order Release

0.00



QC

Memo

0.00

Quality Control

10/04/22 AJ

MF
10-4-22

W/O:		WORK ORDER CHANGES						
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector	

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

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Picklist Print

February 25, 2010 10:54:10 AM

Page 1

Work Order ID: 56498

Parent Item: D3391-025

Parent Item Name: Aft Tube Assembly

Start Date: 2/25/10

Required Date: 3/05/10

Comments: IPP Rev B 06-02-07 ECN773 dwg rev. D EC
IPP Rev: C 06-03-28 Update Manuf. Instructions JLM ☐ ☐ ☐
IPP rev D 07.03.20 revF dwg EC
IPP rev E 07.11.07 rev G dwg ecn 1053p EC verified by: DD

Start Qty: 1.00

Required Qty: 1.00

D6014-090

Manufactured No

100

Each

11.0000

1.0000



ALUMINUM EXTRUSION

Warehouse

Loc Qty

Loc Code

Location

Main Warehouse

LG

11

42768

11

Manufactured No

230

Each

83.0000

4.0000

D3670-4-200



SPACER

Warehouse

Loc Qty

Loc Code

Location

Main Warehouse

ST

83

48198

4

48269

79

AWM 10-3-2
~~10-3-2~~

4 M/D/3/23

W/O:		WORK ORDER CHANGES						
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector	

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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Page 2

February 25, 2010 10:54:10 AM

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Comments: IPP Rev B 06-02-07 ECN773 dwg rev. D EC
 IPP Rev:C 06-03-28 Update Manuf. Instructions JLM ☐ ☐ ☐
 IPP rev D 07.03.20 revF dwg EC
 IPP rev E 07.11.07 rev G dwg ecn 1053p EC verified by: DD

Start Qty: 1.00

Required Qty: 1.00

D2646 Manufactured No 270 Each 52.0000 1.0000



Aft Cap

Warehouse Loc Qty Loc Code
Location

Main Warehouse

FP6 29

52663 ✓ 29

Main Warehouse

fp7 13

52663 13

Main Warehouse

ST 10

46327 4

48109 6

D3537-1 Manufactured No 270 Each 140.0000 1.0000



Wearpad

Warehouse Loc Qty Loc Code
Location

Main Warehouse

FP 57510 74

48288 2

55465 72

Main Warehouse

FP17 66

51678 1

51679 65

February 25, 2010 10:54:10 AM

Shop Packet Print

Page 2

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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Page 3

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 IPP Rev:C 06-03-28 Update Manuf. Instructions JLM ☐ ☐ ☐
 IPP rev D 07.03.20 revF dwg EC
 IPP rev E 07.11.07 rev G dwg ecn 1053p EC verified by: DD

Start Qty: 1.00

Required Qty: 1.00

D3537-7 Manufactured No 270 Each 14.0000 1.0000



Wearpad

Warehouse Loc Qty Loc Code

Location

Main Warehouse

ST 56831 14

45408 3

46346 11

D3553-1 Manufactured No 270 Each 9.0000 1.0000



Gasket

Warehouse Loc Qty Loc Code

Location

Main Warehouse

ST 9

33868 ✓ 9

D3553-3 Manufactured No 270 Each 58.0000 1.0000



Gasket

Warehouse Loc Qty Loc Code

Location

Main Warehouse

FP 58

53480 ✓ 58

1 BR 10-4-22

1 BR 10-4-22

1 BR 10-4-22

February 25, 2010 10:54:10 AM

Shop Packet Print

Page 3

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DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

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 IPP Rev:C 06-03-28 Update Manuf. Instructions JLM ☐ ☐ ☐
 IPP rev D 07.03.20 revF dwg EC
 IPP rev E 07.11.07 rev G dwg ecn 1053p EC verified by: DD

Start Qty: 1.00

Required Qty: 1.00

D3672-1 Manufactured No 270 Each 1,682.000 2.0000



Phenolic Washer

Warehouse Loc Qty Loc Code

Location

Main Warehouse

ST	1182
39275	19
42329	5
47628 ✓	158
52505	1000

Main Warehouse

ST117	500
51674	500

ALS4-1032-130 Purchased No 260 Each 1,678.000 14.0000



Insert

Warehouse Loc Qty Loc Code

Location

Main Warehouse

ST 114407	1678
110511	1678

2. BR 10-4-22

14. BR 10-4-22

W/O:			WORK ORDER CHANGES					
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 IPP Rev:C 06-03-28 Update Manuf. Instructions JLM ☐ ☐ ☐
 IPP rev D 07.03.20 revF dwg EC
 IPP rev E 07.11.07 rev G dwg ecn 1053p EC verified by: DD

Start Qty: 1.00

Required Qty: 1.00

ALS4-1032-225 Purchased No 270 Each 6,230.000 12.0000



Insert

Warehouse Loc Qty Loc Code
Location

Main Warehouse

ST 6230

107441 16

110768 ✓ 6214

12 RF 10-4-02

AN3C4A Purchased No 270 Each 1,033.000 6.0000



BOLT

Warehouse Loc Qty Loc Code
Location

Main Warehouse

ST 114330 1033

112314 13

112720 12

112724 3

112829 1

112991 2

113121 64

113226 344

113644 394

113749 200

6. BF 10-4-02

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

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Page 6

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 IPP Rev:C 06-03-28 Update Manuf. Instructions JLM ☐ ☐ ☐
 IPP rev D 07.03.20 revF dwg EC
 IPP rev E 07.11.07 rev G dwg ecn 1053p EC verified by: DD

Start Qty: 1.00

Required Qty: 1.00

AN3C5A Purchased No 270 Each 465.0000 4.0000



Bolt

Warehouse Loc Qty Loc Code

Location

Main Warehouse

ST	114056	465
111424		8
111707		69
112314		1
113121		125
113149		262

H. BL 10-H-22

AN960C10L Purchased No 270 Each 388.0000 10.0000



washer

Warehouse Loc Qty Loc Code

Location

OFFSHORE

FG	103585	100
	103585	100

Main Warehouse

ST	112116	288
	112612	128
	112612	160

10. BL 10-H-22

WAS 1149C0332 R.

W/O:		WORK ORDER CHANGES						
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector	

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

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NOTE: Date & initial all entries

DART AEROSPACE LTD		Work Order: 56498
Description: Float Skidtube (412)		Part Number: D3391-3
Inspection Dwg: D3391	Rev: H	Page 1 of 1

FIRST ARTICLE INSPECTION CHECKLIST

☒ First Article ☐ Prototype

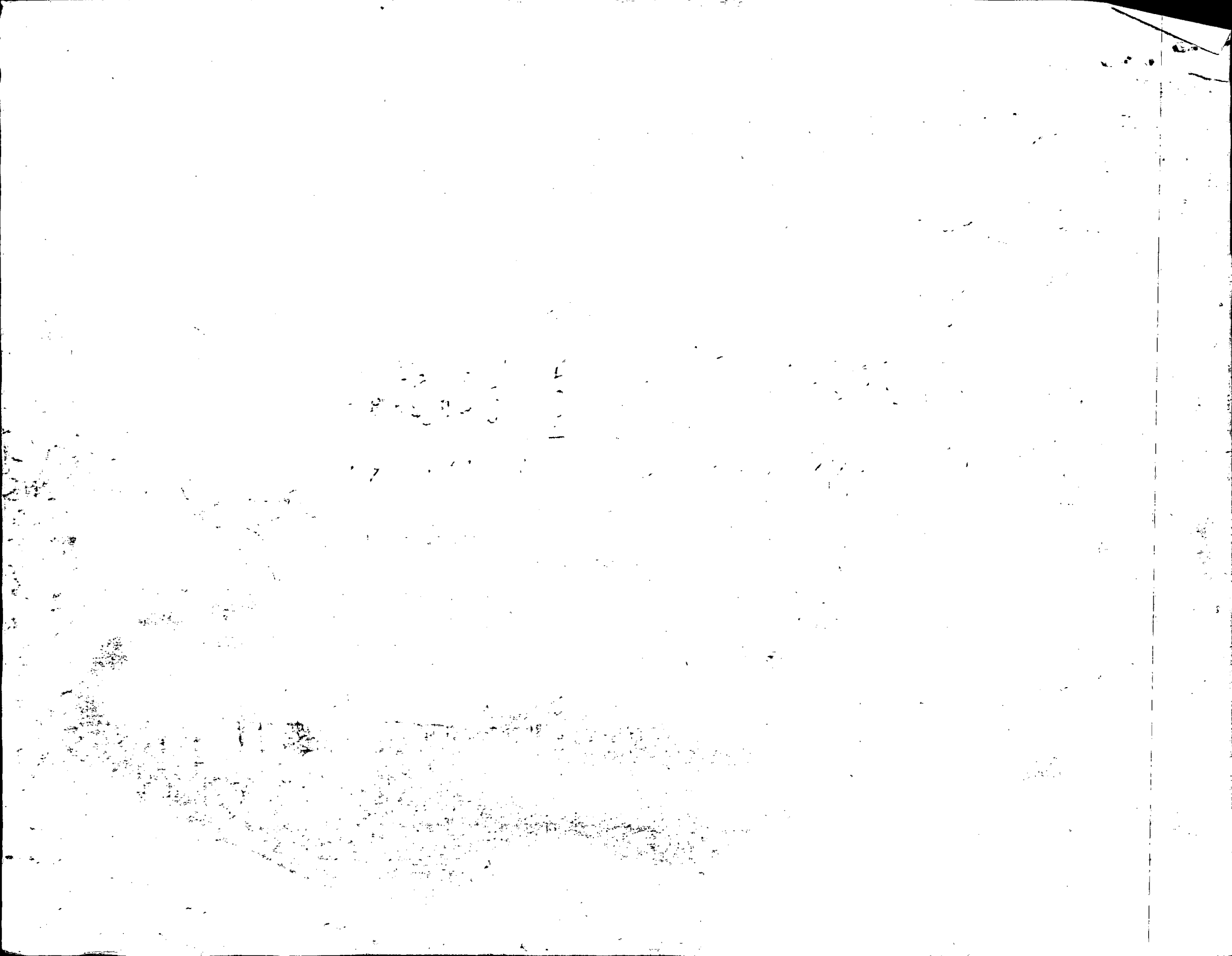
Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
Lathe Section						
14.000	+/-0.010	14.00	✓			
3.500	+/-0.010	3.500	✓			
88.93	+/-0.030	88.93	✓			
44.995	+/-0.030	44.995	✓			
Ø3.200	+/-0.010	3.201	✓			
88.93	+/-0.030	88.93	✓			
Ø3.750	+/-0.010	3.750	✓			
30° x 160° chamfer	+/-0.010	30° x 160°	✓			

Measured by: MD / ANM	Date: 10-03-03
Audited by: [Signature] 10.3.16	Date:

HAAS Section						
1.526	+0.000/-0.030	1.515	✓			
7.500	+/-0.010	7.505	✓			
27.750	+/-0.010	27.755	✓			
31.750	+/-0.010	31.755	✓			
35.250	+/-0.010	35.250	✓			
3.300	+/-0.010	3.290	✓			
0.200	+/-0.010	.203	✓			
3.520	+/-0.010	3.519	✓			
0.687	+0.010/-0.000	.694	✓			
R0.062	+/-0.010	.062	✓			
Ø0.484	+0.005/-0.001	.483	✓			

Measured by: L.P.	Date:
Audited by: 10/03/08 [Signature] 10.3.16	Date:

Rev	Date	Change	Revised by	Approved
A	06.04.24	New Issue P/O D3391-015/-025	KJ/JLM	
B	06.06.19	Dwg revision update	KJ/JLM	
C	07.04.20	Ø0.208 dimension removed	KJ/JLM	
D	07.09.06	0.400 dimension removed	KJ/JLM	
E	07.11.23	Dwg Rev. updated	KJ/EC/DD	
F	09.04.27	Dimensions updated per Rev H and NCR09-028	KJ/JLM	
G	09.11.16	Dimension 0.200 removed	KJ	



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UNCONTROLLED COPY

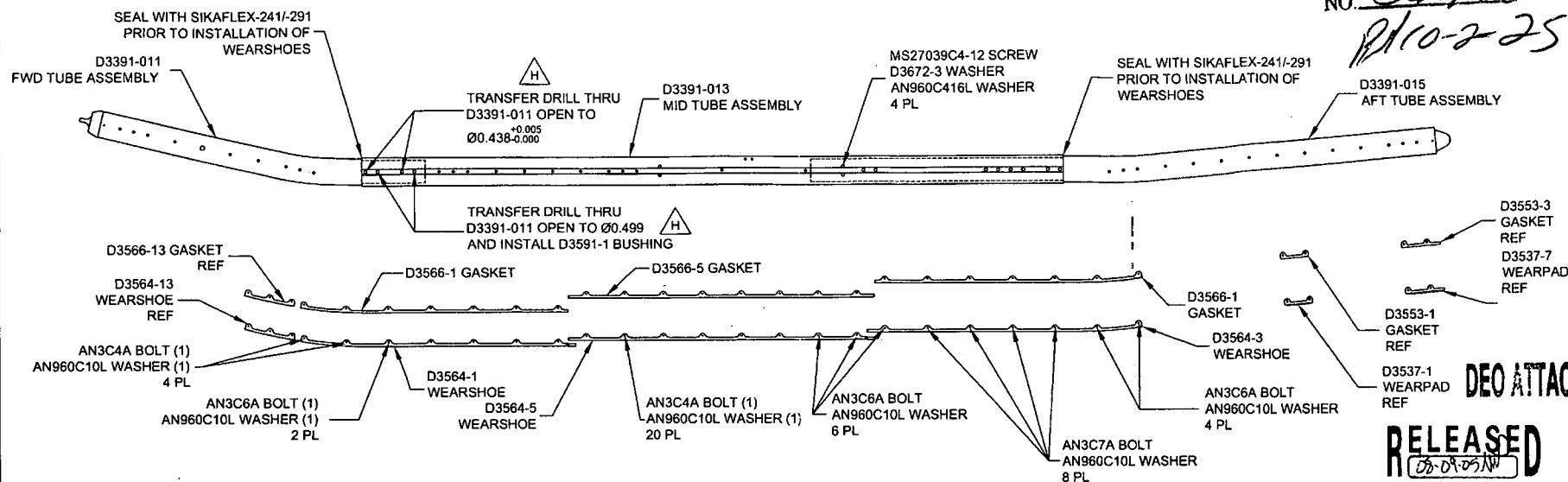
SUBJECT TO AMENDMENT

WITHOUT NOTICE

WORK ORDER

NO. 34428

P/10-2-25



D3391-041 ASSEMBLY

DEO ATTACHED




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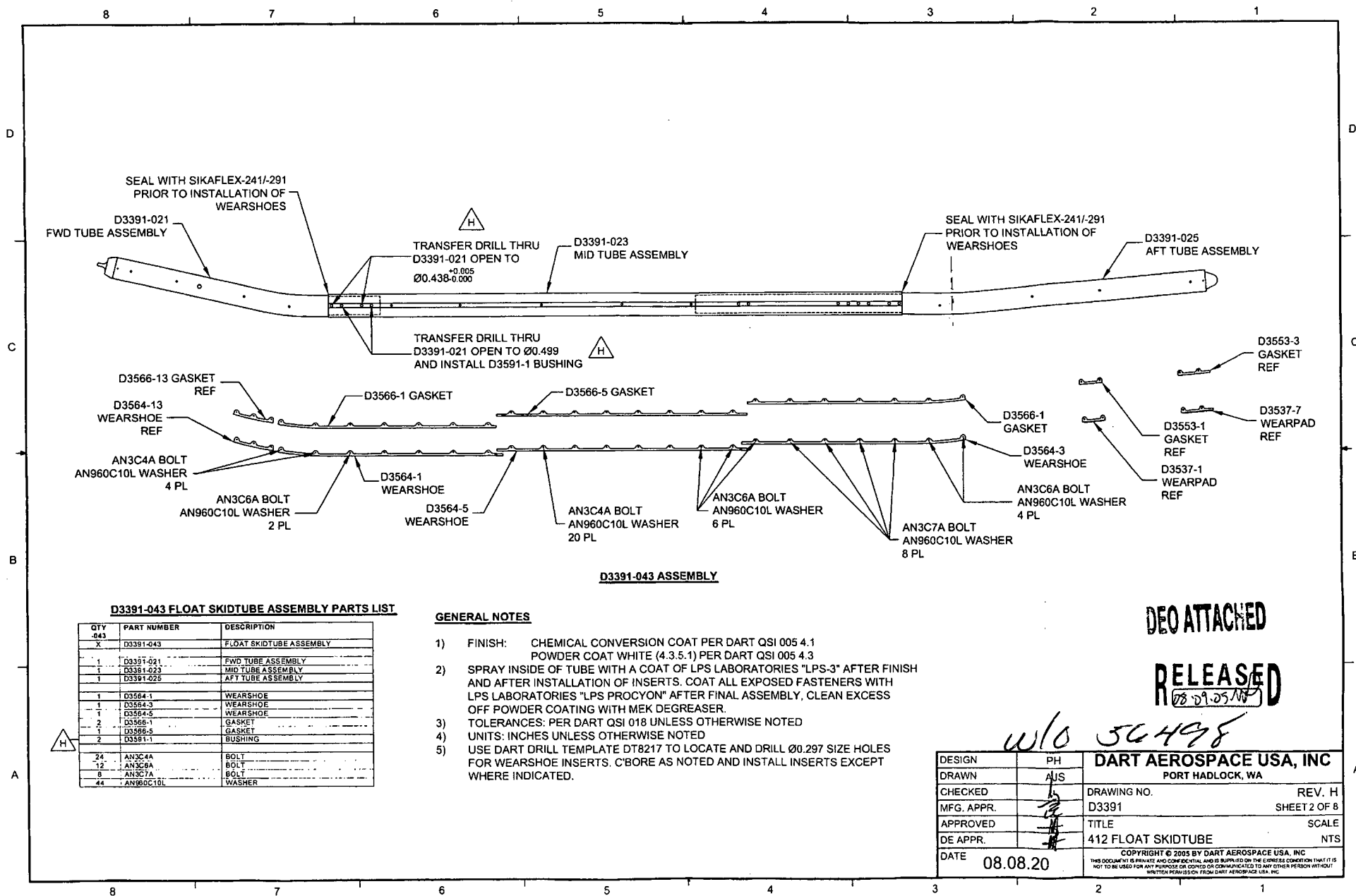
D3391-041 FLOAT SKIDTUBE ASSEMBLY PARTS LIST

QTY	PART NUMBER	DESCRIPTION
1	D3391-041	FLOAT SKIDTUBE ASSEMBLY
1	D3391-011	FWD TUBE ASSEMBLY
1	D3391-013	MID TUBE ASSEMBLY
1	D3391-015	AFT TUBE ASSEMBLY
1	D3564-1	WEARSHOE
1	D3564-3	WEARSHOE
1	D3564-5	WEARSHOE
2	D3566-1	GASKET
2	D3566-5	GASKET
2	D3591-1	BUSHING
4	D3672-3	WASHER
24	AN3C4A	BOLT
12	AN3C6A	BOLT
8	AN3C7A	BOLT
44	AN960C10L	WASHER
4	MS27039C4-12	SCREW
4	AN960C416L	WASHER

GENERAL NOTES

- 1) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
POWDER COAT WHITE (4.3.5.1) PER DART QSI 005 4.3
- 2) SPRAY INSIDE OF TUBE WITH A COAT OF LPS LABORATORIES "LPS-3" AFTER FINISH
AND AFTER INSTALLATION OF INSERTS. COAT ALL EXPOSED FASTENERS WITH
LPS LABORATORIES "LPS PROCYON" AFTER FINAL ASSEMBLY, CLEAN EXCESS
OFF POWDER COATING WITH MEK DEGREASER.
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) USE DART DRILL TEMPLATE DT8217 TO LOCATE AND DRILL Ø0.297 SIZE HOLES
FOR WEARSHOE INSERTS. C'BORE AS NOTED AND INSTALL INSERTS EXCEPT
WHERE INDICATED.

H	DRAWING UPDATED TO CURRENT STANDARDS. SHT 1 PL ADDED D3591-1 BUSHING. ZN C6 Ø0.438 DIM WAS 4 PL. ADDED Ø0.499 DIM AND D3591-1 BUSHING. SHT 2 PL ADDED D3591-1 BUSHING. ZN C6 Ø0.438 DIM WAS 4 PL. ADDED Ø0.499 DIM AND D3591-1 BUSHING. (FOR FURTHER INFO SEE DSI 9364 & NCR 08-074)	AJS	08.08.20
G	REPLACE NAS INSERTS W/ AELS INSERTS SWITCH TO D3670-XXXX SPACERS FOR INSTALLING FLOAT BAGS, DWG REORGANIZED FOR CLARITY	DC	07.07.31
F	ADD SS WEARSHOE, GASKET REMOVE FWD SADDLE HOLE -011/-021	PH	07.01.18
E	CHANGE TOLERANCE, EASE MANUFACTURE	PH	06.04.25
D	UPDATE TOLERANCE, CHANGE HOLE SIZE	PH	06.01.23
C	LENGTHEN AFT EXTENSION	PH	05.09.27
B	DRAWING UPDATES	PH	05.06.10
A	NEW ISSUE	PH	05.02.07
REV.	DESCRIPTION	BY	DATE
DESIGN	PH	DART AEROSPACE USA, INC	
DRAWN	AJS	PORT HADLOCK, WA	
CHECKED		DRAWING NO.	REV. H
MFG. APPR.		D3391	SHEET 1 OF 8
APPROVED		TITLE	SCALE
DE APPR.		412 FLOAT SKIDTUBE	NTS
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D3391-043 FLOAT SKIDTUBE ASSEMBLY PARTS LIST

QTY	PART NUMBER	DESCRIPTION
X	D3391-043	FLOAT SKIDTUBE ASSEMBLY
1	D3391-021	FWD TUBE ASSEMBLY
1	D3391-023	MID TUBE ASSEMBLY
1	D3391-025	AFT TUBE ASSEMBLY
1	D3564-1	WEARSHOE
1	D3564-3	WEARSHOE
1	D3564-5	WEARSHOE
2	D3566-1	GASKET
1	D3566-5	GASKET
2	D3591-1	BUSHING
24	AN3C4A	BOLT
12	AN3C6A	BOLT
8	AN3C7A	BOLT
44	AN960C10L	WASHER

GENERAL NOTES

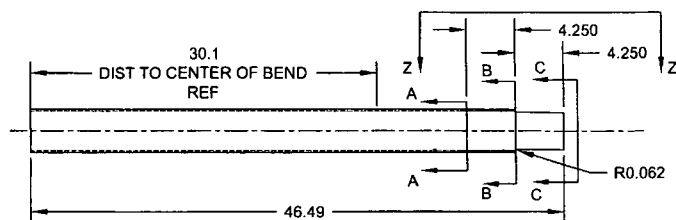
- 1) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
POWDER COAT WHITE (4.3.5.1) PER DART QSI 005 4.3
- 2) SPRAY INSIDE OF TUBE WITH A COAT OF LPS LABORATORIES "LPS-3" AFTER FINISH AND AFTER INSTALLATION OF INSERTS. COAT ALL EXPOSED FASTENERS WITH LPS LABORATORIES "LPS PROCYON" AFTER FINAL ASSEMBLY. CLEAN EXCESS OFF POWDER COATING WITH MEK DEGREASER.
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) USE DART DRILL TEMPLATE DT8217 TO LOCATE AND DRILL Ø0.297 SIZE HOLES FOR WEARSHOE INSERTS. C'BORE AS NOTED AND INSTALL INSERTS EXCEPT WHERE INDICATED.

DEO ATTACHED

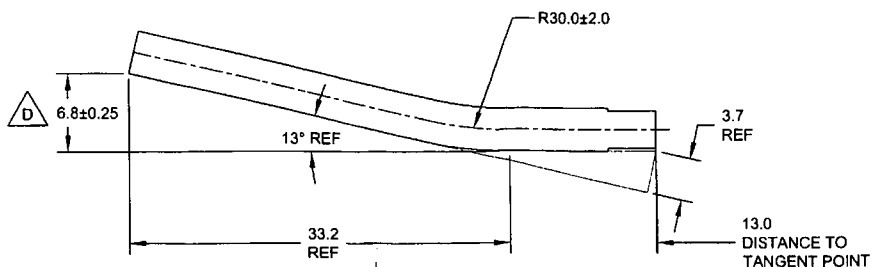
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08-09-05/10

W/O 56498

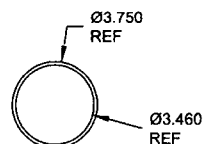
DESIGN	PH	DART AEROSPACE USA, INC	
DRAWN	AUS	PORT HADLOCK, WA	
CHECKED		DRAWING NO.	REV. H
MFG. APPR.		D3391	SHEET 2 OF 8
APPROVED		TITLE	SCALE
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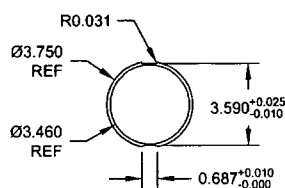
D3391-1 CUTTING DETAIL
(MAKE FROM D6013-047 SKIDTUBE MATERIAL)



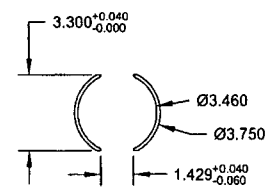
D3391-011/-021 BENDING DETAIL
(MAKE FROM D3391-1)



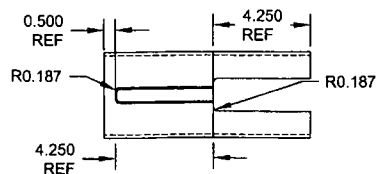
SECTION A-A
SCALE 2X



SECTION B-B
SCALE 2X



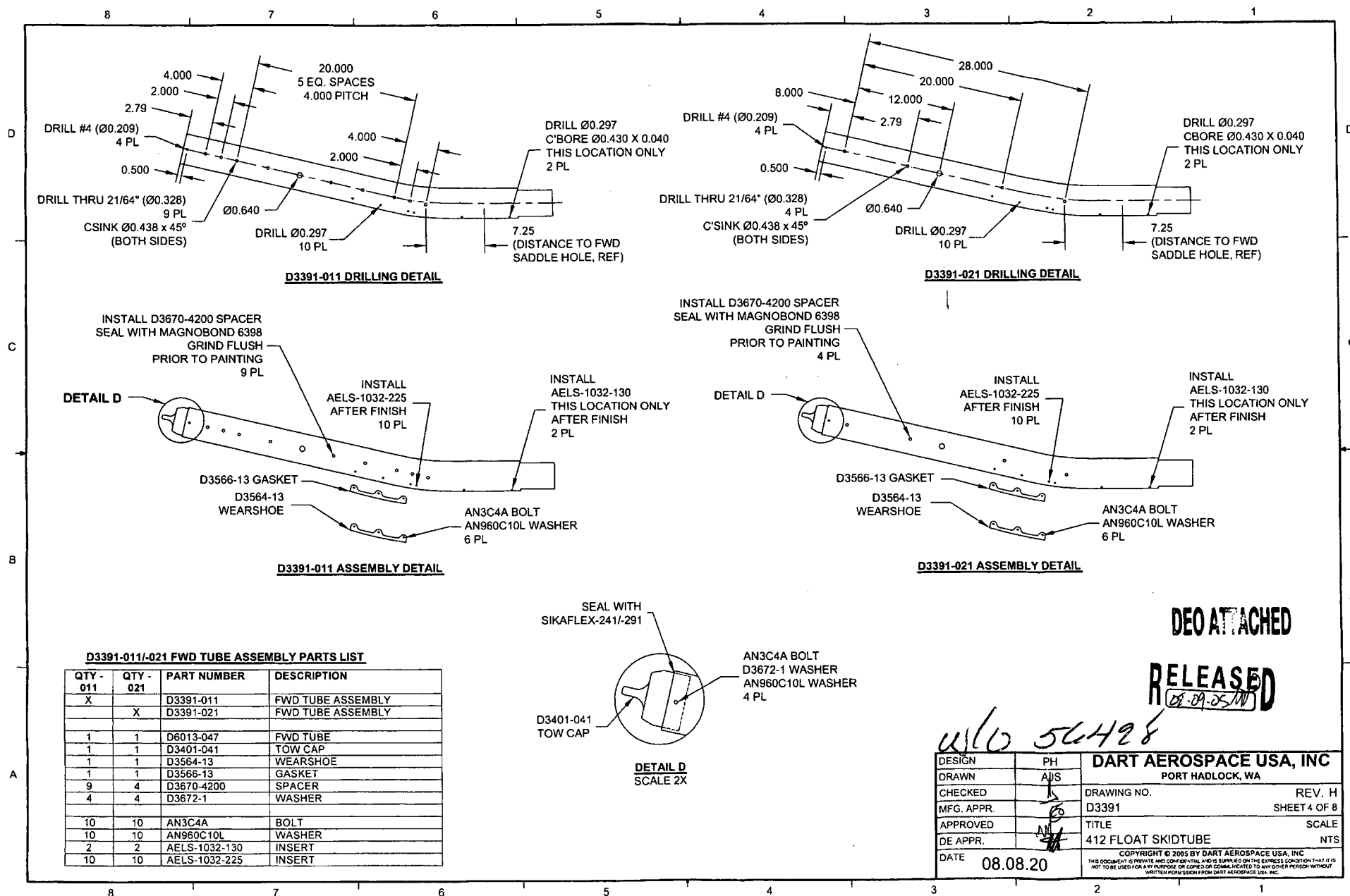
SECTION C-C
SCALE 2X

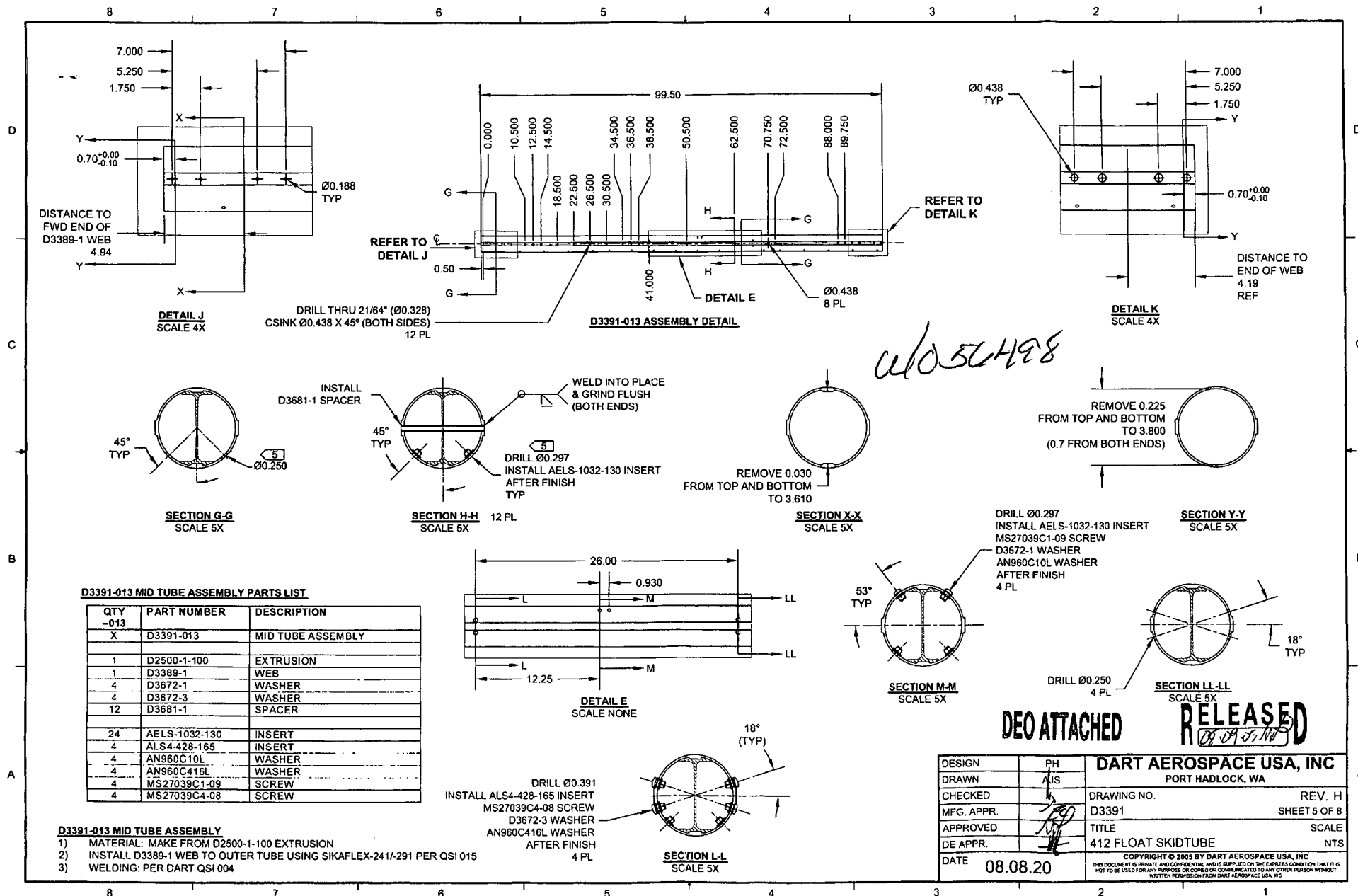


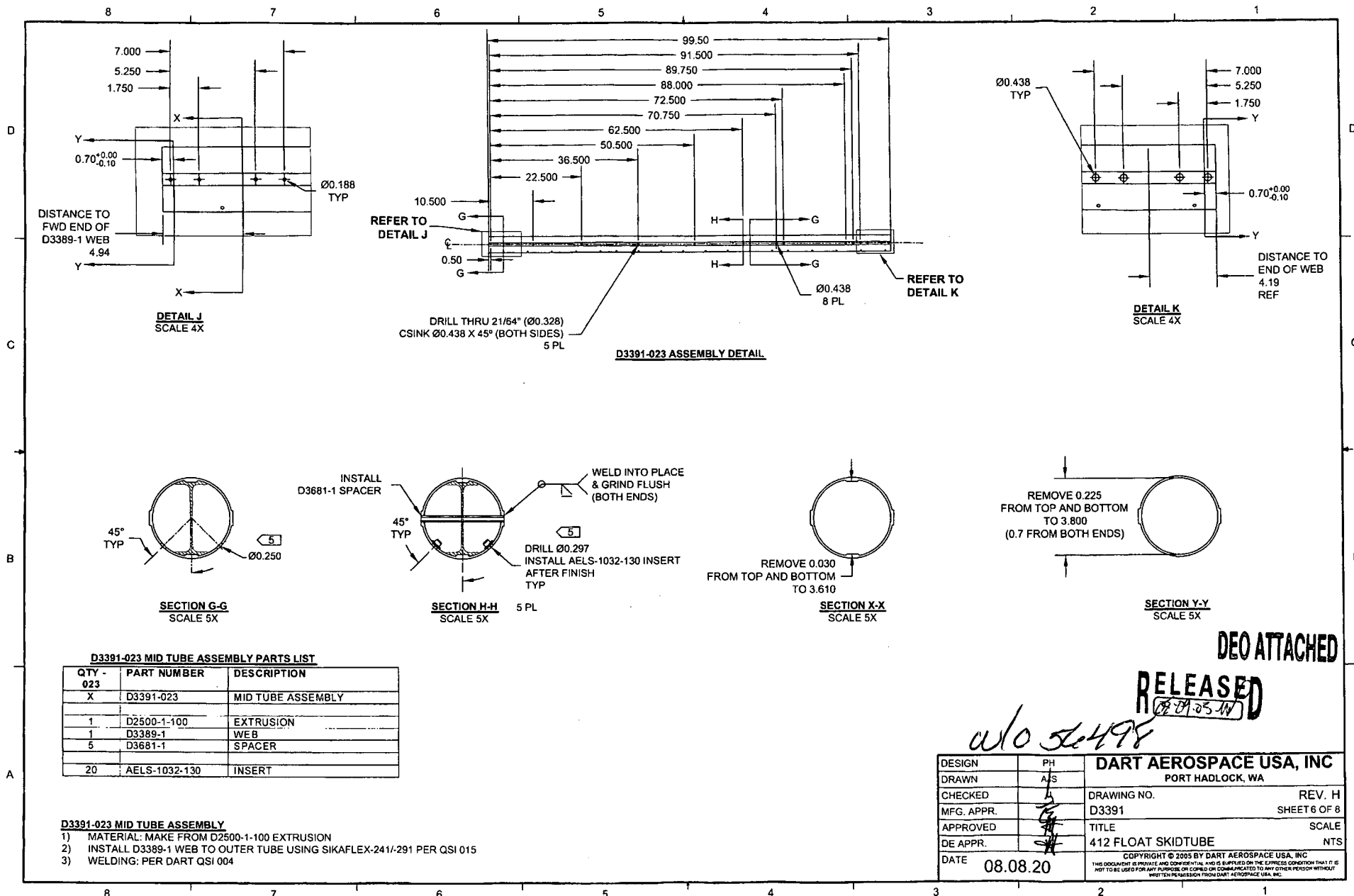
VIEW Z-Z
SCALE 2X

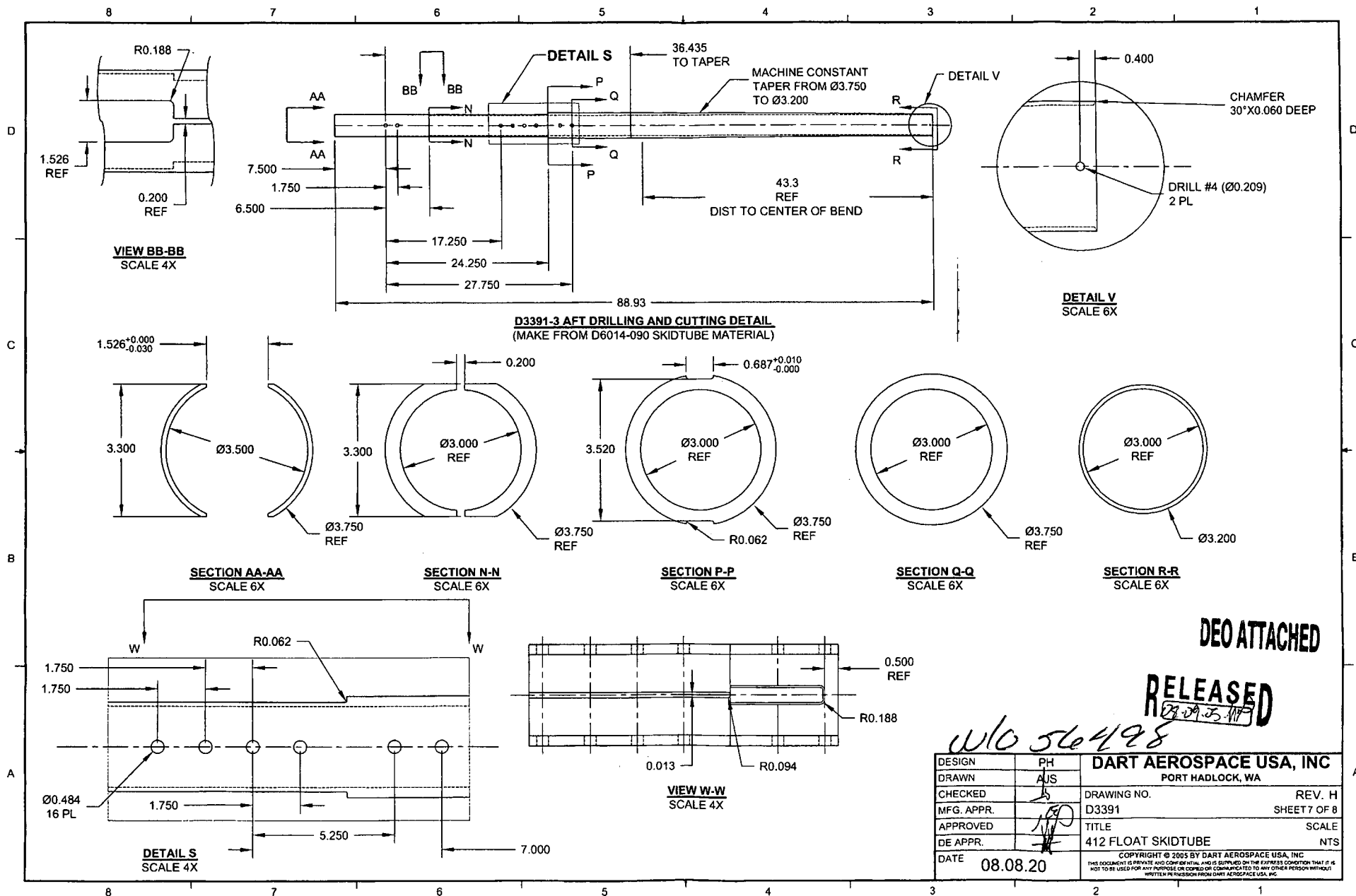
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28-05-11

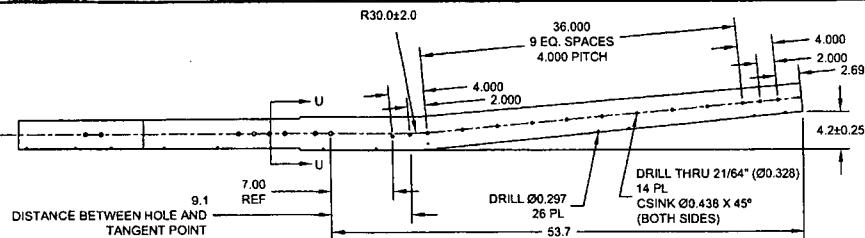
DESIGN	PH	DART AEROSPACE USA, INC	
DRAWN	AJS	PORT HADLOCK, WA	
CHECKED		DRAWING NO. D3391	REV. H SHEET 3 OF 8
MFG. APPR.		TITLE	SCALE
APPROVED		412 FLOAT SKIDTUBE	NTS
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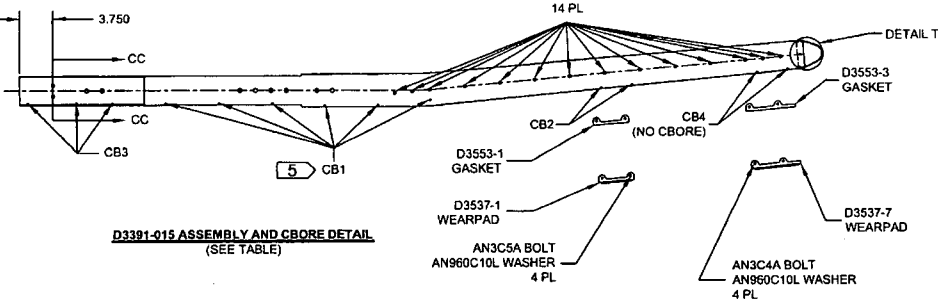






D3391-015 BENDING AND DRILLING DETAIL
(SEE CBORE DETAIL BELOW)

INSTALL D3670-4200 SPACER
SEAL WITH MAGNOBOND 6398
GRIND FLUSH
PRIOR TO PAINTING
14 PL



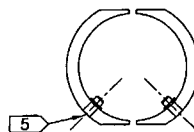
D3391-015 ASSEMBLY AND CBORE DETAIL
(SEE TABLE)

D3391-015/-025 AFT TUBE ASSEMBLY PARTS LIST

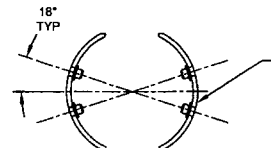
QTY - 015	QTY - 025	PART NUMBER	DESCRIPTION
X		D3391-015	AFT TUBE ASSEMBLY
	X	D3391-025	AFT TUBE ASSEMBLY
1	1	D6014-090	AFT TUBE
1	1	D2646	AFT CAP
1	1	D3537-1	WEARPAD
1	1	D3537-7	WEARPAD
1	1	D3553-1	GASKET
1	1	D3553-3	GASKET
14	4	D3670-4200	SPACER
2	2	D3672-1	WASHER
14	14	AELS-1032-130	INSERT
12	12	AELS-1032-225	INSERT
4		ALS4-428-165	INSERT
6	6	AN3C4A	BOLT
4	4	AN3C5A	BOLT
10	10	AN960C10L	WASHER

CBORE HOLES MARKED CB1-CB4 AS FOLLOWS AND
INSTALL AELS-1032-XXX AFTER FINISH AS NOTED

HOLES MARKED	QTY D3391-015	QTY D3391-025	CBORE	P/N
CB1	12	12	Ø0.430 X 0.170	AELS-1032-225
CB2	4	4	Ø0.430 X 0.170	AELS-1032-130
CB3	6	6	Ø0.430 X 0.040	AELS-1032-130
CB4	4	4	NONE	AELS-1032-130

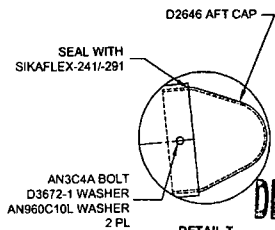


SECTION U-U
SCALE 3X



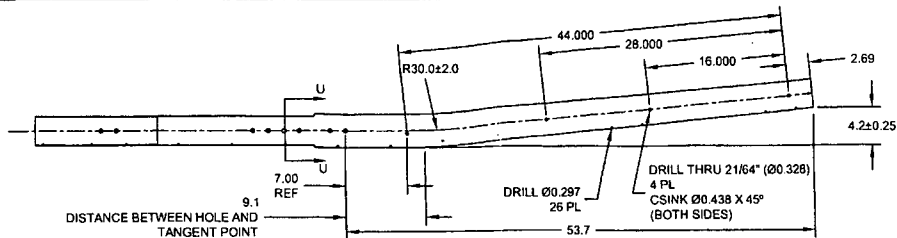
SECTION CC-CC
SCALE 3X

DRILL Ø0.391
CBORE Ø0.516 X 0.040 DEEP
INSTALL ALS4-428-165 INSERT
4 PL



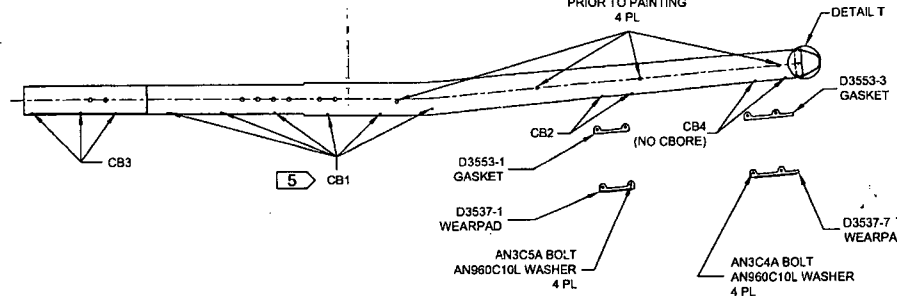
DETAIL T
SCALE 4X

D3391-025 ASSEMBLY AND CBORE DETAIL
(SEE TABLE)



D3391-025 BENDING AND DRILLING DETAIL
(SEE CBORE DETAIL BELOW)

INSTALL D3670-4200 SPACER
SEAL WITH MAGNOBOND 6398
GRIND FLUSH
PRIOR TO PAINTING
4 PL



DEO ATTACHED

RELEASED
08-09-05-11

W/036498

DESIGN	PH	DART AEROSPACE USA, INC	
DRAWN	AJS	PORT HADLOCK, WA	
CHECKED		DRAWING NO.	REV. H
MFG. APPR.		D3391	SHEET 8 OF 8
APPROVED		TITLE	SCALE
DE APPR.		412 FLOAT SKIDTUBE	NTS
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DRAWING NO. D3391	TITLE 412 FLOAT SKIDTUBE	REV. H	DART AEROSPACE USA, INC ENGINEERING ORDER		D.E.O. NO. D3391-H-1	SHEET NO. SHEET 1 OF 1	SCALE NTS
DRAWN <i>CP</i>	CHECKED <i>h</i>	MFG. APPR. <i>MA</i>	APPROVED <i>MP</i>		DE APPR. <i>MP</i>		
DATE 09.09.23	DATE 09.09.24	DATE 09/09/25	DATE 09/09/30		DATE 09/09/30		

PURPOSE:

LPS-3 IS NO LONGER USED DURING ASSEMBLY OF D3391-041/-043 SKIDTUBES.

CHANGE:

AMEND NOTE 2 OF D3391-041/-043 SKIDTUBE ASSEMBLIES (ZN A6-1, A6-2) AS FOLLOWS:

- 2) ~~SPRAY INSIDE OF TUBE WITH A COAT OF LPS LABORATORIES "LPS-3" AFTER FINISH~~
~~AND AFTER INSTALLATION OF INSERTS. COAT ALL EXPOSED FASTENERS WITH~~
 LPS LABORATORIES "LPS PROCYON" AFTER FINAL ASSEMBLY, CLEAN EXCESS
 OFF POWDER COATING WITH MEK DEGREASER.

RELEASED
 2010-02-02

MP

WU 56498

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